

CLAIMS

What is claimed is:

1. A system for preparing a graft vessel for anastomosis to a target vessel, where the anastomosis is performed using an anastomosis tool, and where the anastomosis has an anastomosis length, the system comprising:

a transfer clamp including two arms movable relative to one another, wherein at least one said arm comprises at least one element having a edge, wherein the length of said edge is related to the anastomosis length.

2. The system of claim 1, wherein at least one said element is a jaw connected to said arm.

3. The system of claim 2, wherein said jaw is fixed to said arm.

4. The system of claim 2, wherein said jaw is movable relative to said arm.

5. The system of claim 1, wherein at least one said element is a cutting block.

6. The system of claim 5, wherein at least one said cutting block is movable relative to the corresponding said arm.

7. The system of claim 5, wherein at least one said cutting block is rotatable relative to the corresponding said arm.

8. The system of claim 1, wherein at least one said element has a gripping surface defined thereon.
9. The system of claim 1, wherein at least one said element is a portion of said arm.
10. The system of claim 1, wherein said arms are movable between an open position and a closed position.
11. The system of claim 10, wherein said arms are biased to said closed position.
12. The system of claim 10, further comprising finger pads coupled to said arms, wherein compression of said finger pads moves said arms from said closed position to said open position.
13. The system of claim 1, wherein said transfer clamp is configured to engage the anastomosis tool.
14. The system of claim 13, wherein said transfer clamp includes a stop configured to contact the anastomosis tool.
15. The system of claim 14, wherein said transfer clamp is configured to lock onto the anastomosis tool.
16. The system of claim 1, further comprising an extension arm connected to said transfer clamp.

17. The system of claim 16, wherein said extension arm is fixed to said transfer clamp.
18. The system of claim 16, wherein said extension arm includes a poke-through tip.
19. The system of claim 18, wherein said poke-through tip is soft.
20. The system of claim 18, wherein said poke-through tip is substantially rigid.
21. The system of claim 18, wherein said poke-through tip is substantially tubular.
22. The system of claim 18, wherein said poke-through tip is located at one end of said extension arm.
23. The system of claim 16, further comprising a retractor mount connectable to said extension arm.
24. The system of claim 23, wherein said retractor mount includes a holder movable relative to a remainder of said retractor mount.
25. The system of claim 24, wherein said holder is rotatable relative to a remainder of said retractor mount.

26. The system of claim 24, wherein said retractor mount is connectable to said extension arm via said holder.

27. The system of claim 24, wherein said holder is configured to engage the anastomosis tool.

28. The system of claim 1, further comprising a graft manipulator moveable relative to said transfer clamp.

29. The system of claim 28, wherein said graft manipulator includes two members spaced apart from and biased apart from one another.

30. The system of claim 29, further comprising a prong connected to the distal end of at least one said member.

31. A method for preparing a graft vessel for anastomosis, the anastomosis performed with an anastomosis tool, comprising:

 creating at least one flap at an end of the graft vessel; and
 placing at least one flap onto a surface of the anastomosis tool.

32. The method of claim 31, wherein at least one surface of the anastomosis tool includes at least one spike extending therefrom, and wherein said placing includes placing at least one flap onto at least one spike.

33. The method of claim 32, further comprising poking at least one spike through the corresponding flap.

34. The method of claim 31, further comprising
providing a transfer clamp, and
clamping the graft vessel with said transfer clamp;
wherein said providing and said clamping are performed before said creating
and said placing.

35. The method of claim 34, further comprising coupling said transfer clamp to the anastomosis tool.

36. The method of claim 35, further comprising transferring the graft vessel from the transfer clamp to the anastomosis tool after said coupling.

37. The method of claim 36, further comprising detaching the transfer clamp from the anastomosis tool.

38. The method of claim 34, further comprising orienting the graft vessel at an angle to an element of said transfer clamp before said clamping.

39. The method of claim 34, further comprising defining a chord having a preselected length across the graft vessel at a location in proximity to an end of the graft vessel.

40. The method of claim 39, wherein the length of said chord is related to the size of the flaps.

41. A system for performing anastomosis between a graft vessel and a target vessel, where the anastomosis has an anastomosis length, the system comprising:

 a tissue effector comprising
 an anvil, and
 a staple holder movable relative to said anvil; and
 a transfer clamp connectable to said tissue effector.

42. The system of claim 41, wherein said transfer clamp includes at least one said arm, wherein at least one said arm comprises at least one element having a edge, wherein the length of said edge is related to the anastomosis length.

43. The system of claim 42, wherein at least one said element is a cutting block.

44. The system of claim 43, wherein at least one said cutting block is rotatable relative to the corresponding said arm.

45. The system of claim 41, further comprising a poke-through tip connected to said transfer clamp.

46. The system of claim 41, further comprising a graft manipulator moveable relative to said transfer clamp.

47. The system of claim 41, wherein said transfer clamp is configured to register the graft vessel relative to said tissue effector.

48. The system of claim 41, wherein said transfer clamp is configured to positively engage said tissue effector.

49. A system for performing anastomosis between a graft vessel and a target vessel, comprising:

 a tissue effector comprising

 an anvil, and

 a staple holder movable relative to said anvil; and

 a mechanism configured to register the graft vessel relative to said tissue effector.

50. The system of claim 49, wherein at least one flap is located at an end of the graft vessel, wherein said staple holder includes at least one flap receiving surface, and wherein said mechanism is configured to register at least one flap with at least one said flap receiving surface.

51. The system of claim 50, further comprising at least one spike extending from at least one flap receiving surface.

52. The system of claim 49, wherein said mechanism is connectable to said tissue effector.

53. The system of claim 49, wherein said mechanism is configured to positively engage said tissue effector.